UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/728,558	12/01/2000	Timothy Roscoe	1589	4958

28005	7590	03/07/2005

SPRINT
6391 SPRINT PARKWAY
KSOPHT0101-Z2100
OVERLAND PARK, KS 66251-2100

EXAMINER
POLTORAK, PIOTR

ART UNIT	PAPER NUMBER
2134	

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on <u>03 November 2004</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-22</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-22</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The Amendment, and remarks therein, received on 11/03/2004 have been entered and carefully considered.

2. The Amendment introduces new limitations into the originally sole independent claims: 1, 16 and 18.

3. The newly introduced limitations have required a new search and consideration of the pending claims. The new search has resulted in newly discovered prior art. New grounds of rejection based on the newly discovered prior art follow below.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

Response to Amendment

5. Applicant's arguments have been carefully considered but they were not found persuasive.

6. As per the argument (in regard to claims 1, 16 and 18) that Colby et al. does not teach the attempted inter-node communication between application components because when the communicating client and server are on different networks the server's response to the client would not be an inter-node communication between application components within the network, the examiner points to the newly discovered art, wherein *Stallings* (as discussed below) teaches attempted inter-node communication between applikcation components.

7. As per the argument that if the content-aware flow switch is a processing node and if an application is an application component *Colby et al.* does not teach that the content aware flow switch includes an application component that communicates with another application component on the server (or on the client) the examiner advises applicant that the features upon which applicant relies (i.e., the content aware flow switch includes an application component) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

8. As per claim 17, applicant argues that the combination of *Colby et al., Pfleeger, and Arendt et al.* fails to disclose or suggest all of the limitations of this claim. However, the examiner found no specifics of applicant's argument that the examiner could address.

9. Claims 1-22 have been examined.

10. Claims 1- 3, 5-10, 12,14-16 and 18-20 remain are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby et al. (U.S. Patent No. 6006264) in view of Pfleeger (Charles P. Pfleeger, "Security in Computing", ISBN 0133374866, 1996) and in further view of Stallings (William Stallings, "Cryptography and network security", 2th edition, 1998, ISBN: 0138690170).

11. Colby et al. teach a cluster-based public computing environment (Colby et al., col. 2 lines 22-33), and communications between service components

comprising a network switching system, and a plurality of processing nodes

interconnected via the network switching system (Web Servers, clients and

Content-aware flow switch), a plurality of application components loaded onto

the processing nodes (col. 3 lines 10-28 and col. 1 lines 59-65). Content is

defined as an application in col. 1 (e.g. Java) and col. 3 says that servers

service a client request for content. The client itself must have means to

access the application as well as establish a remote connection between the

client and server apps, each application component having a respective

service-access-point defining (i) a network address of the processing node on

which the application component is loaded and (ii) a port at the processing

node, the port being associated with the application component (Colby et al.,

col. 2 lines 8-45, col. 3 lines 10-12). Furthermore, Colby et al. teach

executable logic that responds to an attempted inter-node communication

between a service and application components but do not teach blocking

disallowed inter-node communication. Colby et al. do not teach executable

logic for traffic filtering.

Pfleeger teaches executable logic solution of filtering traffic (Pfleeger, pg.

428-430, "Screening Router" section) which blocks disallowed inter-node

communication using network and VLAN addresses, and port numbers (SAP)

(Pfleeger, pg. 428-430, "Screening Router" section).

It would have been obvious to one of ordinary skill in the art at the time of

applicant's invention to implement executable logic solution of filtering traffic

as taught by Pfleeger. One of ordinary skill in the art would have been

motivated to perform such a modification in order to implement a security
policy (Plfeeger, pg. 428, "What is a Firewall" section).

12. Colby et al. in view of Pfleeger do not explicitly teach the attempted inter-node
communication resulting from a service access communication received into
the cluster-based computing environment from an entity external to the
cluster-based computing environment via the external network. As a result
Colby et al. in view of Pfleeger do not explicitly teach applying the filter logic
to inter-node communication resulting from a service access communication
received into the cluster-based computing environment from an entity external
to the cluster-based computing environment via the external network.
However, as shown by Stallings the attempted inter-node communication
resulting from a service access communication received into the cluster-
based computing environment from an entity external to the cluster-based
computing environment via the external network is inherent for some of the
data (Stallings, Worms, pg. 504).

It would have been obvious to one of ordinary skill in the art at the time of
applicant's invention to apply the filter logic to all of the data and not to
exclude inter-node communication resulting from a service access
communication received into the cluster-based computing environment from
an entity external to the cluster-based computing environment via the external
network. One of ordinary skill in the art would have been motivated to
perform such a modification in order to prevent spread of network worms.

13. Pfleeger teaches destination addresses saying that "depending on the
protocol a header may contain source and destination addresses" (pg. 430 §
1). Claim 9 is addressed by the section on pg. 430 where Pfleeger says: "A
screening router might be configured to block all packets... etc." Claim 15 is
not explicitly addressed, but obviously if a packet is not allowed it is dropped.
With respect to claim 19, an agent is limited by neither the claim nor the
specification; thus it is understood that the software components read on the
agent. Similarly claim 7 calls for an agent and talks about the interface
through which instructions may be provided. An interface is a necessary
component. Claim 7 talks about VLAN. VLAN is logical grouping of two or
more nodes which are not necessarily on the same physical network segment
but which share the same IP network number. The address range numbers
provided by Pfleeger, e.g. 100.50.25.x meet this limitation (pg.430 § 2).

14. Claims 4, 11, 13 and 21-22 remain rejected under 35 U.S.C. 103(a) as being
unpatentable over Colby et al. (U.S. Patent No. 6006264) in view of Pfleeger
(Charles P. Pfleeger, "Security in Computing", ISBN 0133374866, 1996) and
Stallings (William Stallings, "Cryptography and network security", 2th edition,
1998, ISBN: 0138690170), and in further view of Official Notice for the reason
discussed in the previous Office Action.

15. Claim 17 remains rejected under 35 U.S.C. 103(a) as being unpatentable
over Colby et al. (U.S. Patent No. 6006264) in view of Pfleeger (Charles P.
Pfleeger, "Security in Computing", ISBN 0133374866, 1996) and Stallings
(William Stallings, "Cryptography and network security", 2th edition, 1998,

ISBN: 0138690170), and in further view Arendt et al. (U.S. Patent No.

5819091) for the reasons discussed in the previous Office Action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure: *Shimbo et al. (U.S. Patent No. 6185680).*

Applicant's amendment necessitated the new ground(s) of rejection

presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**.

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as

set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire

THREE MONTHS from the mailing date of this action. In the event a first reply is

filed within TWO MONTHS of the mailing date of this final action and the advisory

action is not mailed until after the end of the THREE-MONTH shortened statutory

period, then the shortened statutory period will expire on the date the advisory

action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the date of this
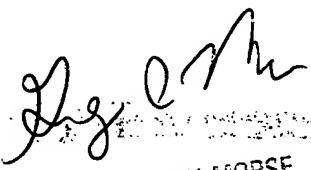
final action.

Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Peter Poltorak whose telephone number is

(571)272-3840. The examiner can normally be reached Monday through

Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to

3:30 p.m

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Gregory Morse can be reached on (571)272-3838. The

fax phone number for the organization where this application or proceeding is

assigned is 703-872-9306.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public

PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free).

Signature

2/17/06

Date

GREGORY MORSE